ABSTRACT OF THE DISCLOSURE

A method and system is provided in which data packets from multiple customer VLANs are forwarded over a MAN using VLAN aggregation. A layer-2 switch located at the edge of the MAN connects the customer VLANs to the MAN.

5   The edge switch aggregates multiple customer VLANs (the "sub-VLANs") into one provider VLAN (the "super-VLAN"). When a packet is forwarded from the sub-VLAN to the super-VLAN and vice versa, the edge switch uses modified bridge forwarding rules to exchange the customer-configured VLAN-IDs with the provider-configured VLAN-IDs before transporting the packet over the MAN. The edge switch further

10   uses modified bridge media access control (MAC) address learning rules to isolate one customer's traffic from another's (i.e. isolate one sub-VLAN's traffic from another sub-VLAN's traffic).